

Alameda County Pedestrian and Bicycle Counting Project

The UC-Berkeley Traffic Safety Center has gathered counts at 50 intersection locations throughout Alameda County to quantify pedestrian and bicycle activity and gain a more accurate understanding of crash risk for these human-powered modes. Thirty of the sample intersections are on CalTrans roadways, and the 20 others are on other arterial and collector roadways throughout the county. This pilot study provides the basis for generating a rough estimate of the number of pedestrians and bicyclists crossing all 528 intersections of CalTrans roadways and all 6,938 other intersections in the county. It demonstrates data collection and modeling methods that could be applied to CalTrans roadways statewide. The study has followed a rigorous scientific process, including gathering fine-grained land use and transportation infrastructure data in GIS; selecting representative locations for sample counts; collecting data through manual and automated methods; developing daily, weekly, seasonal, and weather adjustment factors; accounting for differences in daily patterns of pedestrian activity by land use area; and estimating appropriate statistical models. This research project is being conducted by the UC-Berkeley Traffic Safety Center for the California Department of Transportation and Alameda County Transportation Improvement Authority.